

OASD(Sustainment)



Product Support Policy Trends, LCL Workforce Update, and Lessons Learned

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Office of Deputy Assistant Secretary of Defense (Product Support)





USD(A&S) alignment with the National Defense Strategy (NDS)



NDS Strategic Approach **SecDef 3 Lines of Effort**



1. Build a More Lethal Force

- Prioritize preparedness for war.
- Modernize key capabilities.
 - Nuclear forces, Space and cyberspace as warfighting domains, C4ISR, Missile Defense, Joint lethality in contested environments, forward force maneuver and posture resilience, advanced autonomous systems, resilient and agile logistics.
- -- Prioritize preparedness for war.
- -- Incorporate sustainment planning from beginning as we **design systems** to **design maintainable** systems.
- Evolve innovative operational concepts.
- Develop lethal, agile, and resilient force posture (LCL workforce → Readiness) (Sustainment Reform)
- Cultivate workforce talent

2. Strengthen Alliances and Create New Partnerships

- Uphold a foundation of mutual respect, responsibility, priorities, and accountability.
- Expand regional consultative mechanisms and collaborative planning.
- Deepen interoperability.
- Enduring coalitions: Indo-Pacific, NATO Alliances, Middle East, Western Hemisphere, Africa.

3. Reform the Department for Greater Performance and Affordability

- Deliver performance at the speed of relevance.
- Organize for innovation.
- Drive budget discipline and affordability to achieve solvency.
- Streamline rapid, iterative approaches from development to fielding.
- Harness and protect the National Security Innovation Base.

NDS Strategic Approach SecDef 3 Lines of Effort

USD(A&S) Intent



1. Build a More Lethal Force

- Prioritize preparedness for war.
- Modernize key capabilities.

Do everything in context of NDS and SecDef 3 Lines of Effort:

- Nuclear forces, Space and cyberspace as warfighting domains, C4ISR, Missile Defense, Joint lethality in contested environments, forward force maneuver and posture resilience, advanced autonomous systems, resilient and agile logistics.
- -- Prioritize preparedness for war.
- -- Incorporate sustainment planning from beginning

as we **design systems** to **design maintainable** systems.

(Partner SE and Spt Analysis for pre-AoA, AoA, and trades planning.)

- Evolve innovative operational concepts.
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Buy things more simply, more quickly, with more capability.

"Get comfortable with being uncomfortable."





LCL Defense Acquisition Workforce efforts aligned with National Defense Strategy (NDS)



NDS: Lethality (1 of 2) Cultivate Workforce Talent Recruiting – Developing – Retaining



- High-quality military and civilian workforce is essential for warfighting (WFX) success.
- Lethality and Agility is enabled by Workforce ability to
 - integrate new capabilities
 - adapt WFX approaches
 - change (CPI)
- Talent management
 - leaders competent in national-level decision-making
 - requires broad revision of talent management
 - o fellowships, civilian education, and interagency decision-making
 - alliances and coalitions



NDS: Lethality (2 of 2) Cultivate Workforce Talent Recruiting – Developing – Retaining



- Professional Military Education (PME)
 - o stagnant: focused mandatory credit at expense of lethality & ingenuity
 - o change: emphasize intellectual leadership and military professionalism
- Civilian workforce expertise
 - o need for motivated, diverse, and highly skilled
 - information experts
 - data scientists
 - computer programmers
 - basic science researchers
 - engineers
 - use information not simply managed
 - streamlined and non-traditional pathways to bring critical skills on board quickly





Trending Initiative:

Broaden
LCL Workforce Skill Set
to include
Sustainment Engineering
& Supportability Analysis

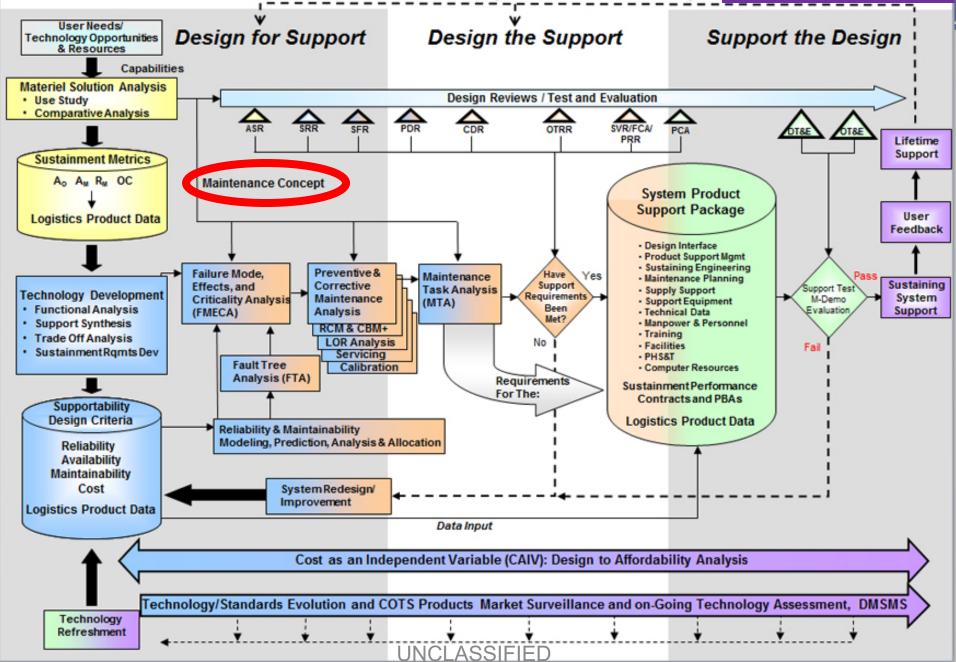


Supportability Analysis Life Cycle Framework Continuous Assessment and Improvement for Affordability

DAU CLL 012

Supportability Analysis







Recommended DAU Courses



DAU CLL 033: Logistician's Responsibilities During Major Technical Reviews

DAU LOG 211: Supportability Analysis resident 4.5 days – CLL 008 & CLL 012 prerequisites, suggested LOG 200 / 201

DAU **CLC 007: Source Selection** – OSD DPAP recommended (Defense Procurement and Acquisition Policy)

DAU **CLM 005:** Industry Proposals and Communication – OSD DPAP recommended reviews process of vendor discussions during a source selection



LCL Certification Requirements Education: Proposed Bachelor's Degree



- <u>Proposed</u> Course of Action (COA) that alleviated <u>most</u> concerns:
 - require bachelor's degree in any field of study
 - exempt enlisted members
 - tier the requirement to begin at LCL Level II and includes Level III
 - exempt LCL DAWF member who are LCL certified on or before October 1, 2019.



LCL Certification Requirements Consideration of Bachelor's Degree Requirement



Require bachelor's degree in any field of study for LCL Levels I, II, and III. Continue "desired education" in logistics-related fields of study. (formerly positive degree requirement)

Problem Statement: How do we ensure the current and future LCL workforce are leaders capable of assessment and management of Logistics Product Data (LPD) deliverables while ensuring affordable availability?

Capable of determining sustaining requirements including:

supportability analysis
sustaining engineering
reverse engineering
rapid prototyping
business
Contracting
similar fields
emerging technologies and application to sustaining

Plan to exempt:

- Those LCL certified by FY20
- Enlisted Military
- OccSeries Equipment Specialists 1670
- Inventory Specialists 2010



LCL Certification Requirements Consideration of Bachelor's Degree Requirement



- Outcome-based product support strategies must address:
 - enabling technologies
 - agile processes
 - transformative capabilities
 - and strategic priorities, such as:
 - Agile Supply Chain Management
 - "Big Data" Analytics / Predictive Analytics
 - Augmented and Virtual Reality
 - Artificial Intelligence/ Machine Learning
 - RAM Analysis and RCM
 - Digital Engineering, Model Based Systems Engineering, and Digital Thread/Digital Twin
 - Agile Software Life Cycle Management
 - Additive Manufacturing (3D Printing) & Advanced Manufacturing
 - Cybersecurity & Supply Chain Risk Management (SCRM)



Logistics Landscape: LFC vs. LCL

Life Cycle Logist ~20,000 perso



Uniformed Service Logistics Community

(total size being determined)

~1,200 Military are in the LCL Acquisition Workforce

Product Support Managers
129 KLP PSM (Q2FY18)

~2,650 members of the LCL Acquisition workforce are occupational series that are not part of the Logistics Functional Community (examples include 1515 Operations Research Analyst, 0343 Program Analyst, and 0301 Admin stration and Program Staff)

Personnel performing logistics functions but not in a logistics occupational series and not in the acquisition workforce (e.g., 0343, 0301, etc.)

Supply Management
-27,000 persons (Q3FY18)

Maintenance Support
-92,000 persons (Q3FY18)
-20,000 persons (Q3FY18)

Civilian Logistics
Functional Community
~156,000 persons (Q3FY18)
OSD Functional Community Manager





Learn. Perform. Succeed

Four Logistics Workforce Categories from 2008 DoD Logistics Human Capital Strategy (HCS)



Shortcut Link - https://shortcut.dau.mil/acq/dodloghcs

SUPPLY MANAGEMENT



Includes procurement to disposal of defense system material, and integration of multiple material sources and processes to meet war fighter requirements.

Forecasting and Demand Planning

Supply Planning

Sourcing

Inventory Management

MAINTENANCE SUPPORT



Includes planning and executing maintenance, both scheduled and unscheduled, to defense system equipment.

Maintenance Operations (includes depot maintenance)

Production & Support

DEPLOYMENT/ DISTRIBUTION/ TRANSPORTATION



Includes transportation, packaging, cargo scheduling, and dispatching of materials, support services, and personnel in response to customer requirements to move and sustain the force.

Physical Distribution/ Transportation Operations

Deployment Planning

LIFE CYCLE LOGISTICS



Includes planning, development, implementation, and management of a comprehensive, affordable, and effective systems support strategy.

Logistics Design Influence Integrated Product Support Planning

Product Support & Sustainment

Configuration Management

Reliability & Maintainability

Technical/Product Data Management

Supportability Analysis

Bottom line: Support the Warfighter!





Product Support Policy and DoDI 5000.02 UPDATE



OASD(Sustainment)

Product Support Guidance & Alignment



DoDI 5000.02

Overarching ACQ direction Encl 6 LC Sustainment Encl 8 Affordability Table 2 MS / Phase Info Regts



Implementation Guidance:

What must be included in planning product support planning?

Defense Acquisition Guidebook Acquisition guidance Chapter 4, Life Cycle Logistics



Life Cycle Sustainment Plan Outline 2.0

Best Practices:

<u>How</u> do I plan for product support? What should I consider during each phase?

LIPE-CYCLE SUSTAINMENT PLAN
Sample Cuttine
August 19, 2011
1966-1 2

Standardized Outline

makes it easy to locate information.

For example:
Contracting knows to look in SECT X for TDP.

Documentation of sustainment planning

Additional Guidance documents to supplement Product Support

















PPP Guidebook Partnership development (October 2016)

BCA Guidebook COA analysis process (February 2014)

O&S Cost Mgt. Guidebook Cost guidance (February 2016)

PBL Guidebook
Performance Based
Strategy &
Arrangements
(April 2016)

PSM Guidebook
Product Support,
management and
reference
(April 2016)

(I)LA Guidebook Logistics Readiness Assessment (July 2011)

RAM-C Guidebook Design for Supportability (June 2009)

MIL- HDBK-502A Supportability Analysis Process (March 2013)



USD(Acquisition & Sustainment) **FY 2019 Priorities**



A&S Spotlight Newsletter – January 22, 2019 – Issue 2

- Drive F-35 [O&S] Costs Down
- Modernize the Nuclear Deterrent
- Collaborate with the UK on NCB Weapons Modernization
- Provide Real-time Response to COCOMs
- Execute FY 2016-2019 NDAA Acquisition Reforms
- Implement Executive Order 13806
- Expand Collaboration with Emerging Partners
- Enhance DoD Acquisition Workforce Talent Management
- Improve Supply Chain Operations
- Refine Internal A&S Business Processes

A&S Spotlight Newsletter – April 22, 2019 – Issue 5

• NDAA FY16 and FY17: balance rapid fielding with overall affordability

to improve lethality and readiness

- ASD(A) (Mr Fahey) made up of our offices:
 - Acquisition Enablers (AE)
 - Platform and Weapon Portfolio Management,
 - Information and Integration Portfolio Management
 - Defense Pricing and Contracting
- ASD(A) Acquisition Reform within these four broad categories:
 - Restructuring Acquisition Policy and Governance
 - Contracting at the Speed of Relevance
 - Strengthening and Securing the Defense Industrial Base
 - Effective Training of the Acquisition Workforce



Planned Updates: draft DODI 5000.02 (re-issue) "DoDI 5000.02 Rewrite"



- Re-write of DoDI 5000.02 objective is in progress:
 - simplifying presentation
 - improving process effectiveness
 - linking the policy to Defense Acquisition University (DAU) digital resources.
- Revised policy will institutionalize key statute changes from NDAA FY 2016-2019.
- DAB OIPT Replacement Process Implementation per NDAA FY2016 Section 807
 - OASD(A) leads new version of DAB OIPT process.
 - Clock begins 30 days after the Service submits AoA Report.
 - Review cost, schedule, and performance.
 - Includes Sustainment and O&S Cost Affordability factors.
- Encl 8 Affordability: integrate Service Annual Portfolio Reviews, Sustainment Reviews, O&S Cost Transparency and CLS cost reporting, and align with emerging implementation of NDAA'17 SEC 807 (new DAB/OIPT) cost, schedule, and performance.
- "Tailoring In" implementation:
 - give PMs greater authority in the determination of what information is needed
 - expanded discussion of technology transition: document the relationship between technology prototyped via Middle Tier Acquisition (MTA) and the traditional acquisition system.



Planned Updates:

draft DODI 5000.02 (re-issue)







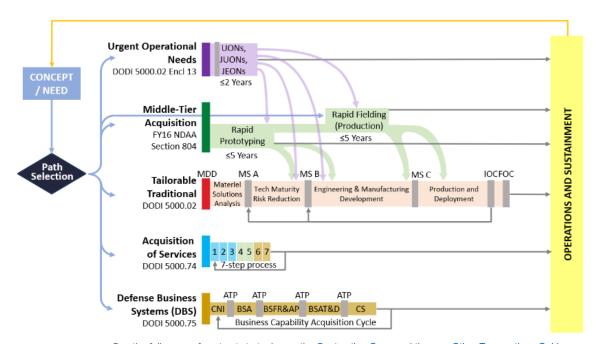
https://aaf.dau.mil/aaf/

Home



There are many pathways for DoD to deliver capabilities.

This tool helps you to select the right pathway and provides you detailed guidance for each.



See the full range of contract strategies on the <u>Contracting Cone</u> and the new <u>Other Transactions Guide</u>. Is this tool helpful? We want your feedback on the content, usability, and improvement ideas. Contact us at <u>aida@mitre.org</u>.

This prototype was developed by MITRE for USD(A&S).

Urgent Operational Needs | Middle Tier of Acquisition | Tailorable
Traditional | Acquisition of Services | Defense Business System

Click below for brief descriptions.

Urgent Operational Needs

Middle Tier of Acquisition

Tailorable Traditional

Acquisition of Services

Defense Business + Systems

•





Planned Updates: draft DODI 5000.02 (re-issue) Enclosure 6 (Life Cycle Sustainment)



Encl 6 (Life-Cycle Sustainment) will add Sustainment Reviews and require:

- PSS and KPP/KSA performance of metrics assessment
- O&S Cost traceability throughout Life Cycle
- ID performance thresholds (RAM-C) for follow-on reviews
- MDA memo w/ supporting data posted in AIR NLT review + 30 days
- no change to frequency (every 5 years after IOC)

Sustainment Reviews will include O&S Cost Reporting (collaboration with CAPE)

- <u>Bottom-Line</u>: All programs +\$100M require cost reporting statute requiring CLS cost reporting per WSARA 2009, NDAA'12, NDAA'17
- Basically all programs over \$100M are required to do cost reporting.
- CLS cost reporting required regardless of contract type valued +\$50M (TY dollars)
- All major contracts and subcontracts regardless of contract type, valued at more than \$50 million (TY dollars) requires cost reporting.
- Service Cost Agencies already active members of VAMCOSC Working Group.
- DFARs clauses mandating cost reporting.
- Additional information regarding cost reporting requirements, policy, and guidance can be found here: http://cade.osd.mil/



Planned Updates: draft DODI 5000.02 (re-issue) Enclosure 6 (Life Cycle Sustainment)



Sustainment Risk Mitigation begins at Inception:

- Correlate PSS to resources, including Affordable Readiness and O&S Cost Affordability
- Sensitivity Analysis and Direct Correlation to MR, MC and O&S Cost Traceability
- * MTA per NDAA'16 Sec804: life-cycle and sustainment costs key considerations for any MTA
- OTA / MDA-delegation / Milestone-entry decision support
- Sustainment Baseline
- Sustainment Reviews
- DMSMS / Obsolescence
- Corrosion Prevention (& needed in COTS) and cross-reference DoDI 5000.67
- * 809 Panel: consider recommendations
- GAO: spare parts
- * <u>ESOH</u>: Environmental, Safety, and Occupational Health considerations (from SEP to LCSP at Milestone C)
- Supply Chain Disruption considerations
- Cybersecurity considerations for Supply Chain Integration/Risk Mgmt (SCI/SCRM)
- ❖ Software Life Cycle Logistics
- **SCI:** Supply Disruption
- ❖ Business Sys cross-reference DoDI 5000.75
- International Certification



OASD(Sustainment) Sustainment Synchronization Meeting



LCSP Outline Version 2.1 John Spicer [ODASD(Product Support)]

- ☐ LCSP Outline Version 2.1: to reflect one minor change to the current outline
- ☐ Adds one single supplement Summary of Actions
 - outlined in current LCSP Outline Chapters 3 9
 - Mitigation Plan ID office responsible for listed actions and estimated completion dates
- ☐ Intent: strategic summary of actions needed to execute the sustainment plan.
- ☐ Key Take-Aways:
 - change represents a small addition to the current outline
 - supplement addresses Mr. McMahon's direction without significantly revising Version 2.0.
 - Goal: 10 page Executive Summary
 - O&S Cost Drivers
 - SecDef set 80% MC Rate
 - NMCM Goals
 - NMCS Goals
 - Supply Chain Repairable Cycle Time (RCT)
 - Cost Sharing Provisions
 - O&S Cost Affordability Targets / Goals
 - Risk: Sustainment and O&S Cost Risk Mitigation Plan
 - Ground Rules / Assumptions / Facts





DoD Business SystemsDoD Instruction 5000.75



DoD Instruction (DoDI) 5000.75 (Business Systems Requirements and Acquisition)

- ❖ signed February 2, 2017
- establishes policy for business systems requirements and acquisition under the Business Capability Acquisition Cycle

Actions to date:

- working group (WG) established early CY2018
 - ♦ began **DoDI 5000.75** revision to provide better content clarification
- ❖ WG members:
 - OSD (ASD Acquisition, CIO, CMO and ASD Sustainment)
 - ♦ Services (Acquisition, Logistics, CIO & CMO)
 - ♦ PEO and Program Management offices
 - ◆ DAU
- ❖ WHS pre-signature review process delayed ~ 2 weeks
- Steps to post WHS pre-signature review:
 - ✓ Legal Sufficiency Review
 - ✓ Clearance by the Defense Office of Prepublication and Security Review
 - ✓ Routing to Ms. Lord for FINAL SIGNATURE.
- Final signature of Change 2 is anticipated by late June 2019
- ❖ NEW POC: Ms. Jennifer Lednicky, 703-692-0721, <u>Jennifer.a.lednicky.ctr@osd.mil</u> OPDASD(Acquisition Enablers)
- Portal Link: https://apps.sp.pentagon.mil/sites/dodips/lists/issuance actions/dispform.aspx?ID=1544 UNCLASSIFIED



NDAA FY2017 SEC 844

Sustainment Planning in the Acquisition Process MITRE's Findings and Recommendations



PURPOSE: 5 Major MITRE Corporation key findings/recommendations of their FY 2017 NDAA Section 844 study.

- (1) Cost and (2) Programming and Budgeting: Create a common taxonomy for sustainment cost and build traceability from sustainment cost estimates to financial resources, to appropriations, and ultimately to expenditures.
- (3) Acquisition: Continue Defense Acquisition Executive Summary (DAES) assessments to identify program-related sustainment issues early in the life cycle. Develop a common sustainment data repository and a centralized Intellectual Property database.
- (4) Requirements: The study asserts the importance of the requirements process to weapon system sustainment.
- (5) Research and Development: Establish an enterprise-level DoD Research and Development (R&D) initiative, policy, or guidance to reduce sustainment costs.

ODASD(Product Support) CONCLUSIONS / RECOMMENDATIONS:

Study substantiated some perceptions held by the Department and provides analytical basis for those perceptions.



NDAA FY2017 SEC 844

Sustainment Planning in the Acquisition Process



NDAA FY2019 – **Sec. 832**

Implementation of recommendations of the (NDAA FY2017 Sec. 844) independent study on Consideration of Sustainment in Weapons Systems Life Cycle

- Department can opt out of specific recommendations
- if we provide specific rationale and an alternative action

NDAA FY2017 SEC 844 – MITRE study / report NDAA FY2019 SEC 832 – *Draft* SASC Bill

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Product Support and O&S Cost Affordability Trends



Supportability Engineering Trends and Best Practices David Jean [ODASD(Product Support)]



- ☐ Independent Technical Risk Assessment (ITRA) and SEP Review
- R&M Engineer collaboration on Sustainment Concerns including Reliability Growth
- ☐ April 2019 ITRA take-aways:
 - ❖ Communication: biggest issue within DoD projects

 PSM Office communications challenged w/ Requirements and T&E teams.
 - Reliability Growth: DoDI 5000.02 and <u>SEP requirement needs TEMP and Testing strategy</u> analysis to determine RG curve and Corrective Action Periods.
 - Potential Analytical tools: AMSAA models for Discrete (pass/fail) and Continuous(MTBF) systems; and RGA Cost;
 - Missing from RAM-C report:
 - Own the Technical Baseline(OTTB): program objective
 - Cost Analyses to determine the most effective areas of TDP to purchase.
 - Analysis details: Methodology, Assumptions, and estimated benefits of OTTB should be reflected in RAM-C, along with other O&S Cost KSA elements.
 - Software Reliability
 - Different than SW MTBF metric
 - level or rigor in SW Development approach has been found to be a better practice throughout industry of late, such as: fault insertion testing, various of types and frequency of SW Testing events, ...
 - Maintain a System Metric (Including failures due to both SW and HW)





Supply Chain Disruption Eliminating Sole Source Supplier

Trends and Best Practices

Ms. Linda Tran [NAVSEA/ODASD(PS)]

and

LtCol Shonry Webb (OSD Sustainment Fellow)



- ☐ Supports NDS/SecDef LOE: Reform the Department for Greater Performance and Affordability
- ☐ Supply Disruption Trends impact on MC Rate and Production Line
- ☐ OPUS Modeling of <u>unforecast sole source supplier elimination from supply chain</u>
 - projected <u>severe impact on Mission Capable (MC) Rate and Production Line</u>
 - Prevented reaching its Acquisition Objective
 - OPUS modeling is commercial best practices to mitigate supply chain disruptions





Opus Suite – Three integrated analysis tools



OPUS10 – Logistics Support Optimization

- Maintenance and Support concept
- Design tradeoffs
- Spares and maintenance Resources
- etc.

SIMLOX – Performance Simulation

- Operational Availability
- Resource Utilization
- Mission Effectiveness
- etc.

CATLOC – Cost Analysis

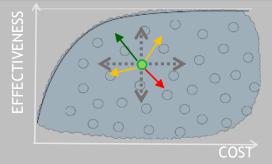
- Life Cycle Cost Management
- Cost driver identification
- Financial Risk Management
- etc.



Opus Suite – Analysis Capability for Life Cycle Management Consequence Analysis – Understand how decisions impact cost effectiveness during life cycle

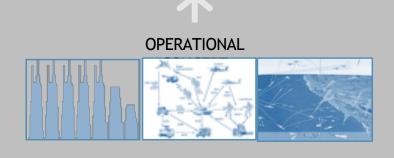
- Identify cost-effective decisions/alternatives/solutions
 - ensure good design
 - optimal balance between performance and cost











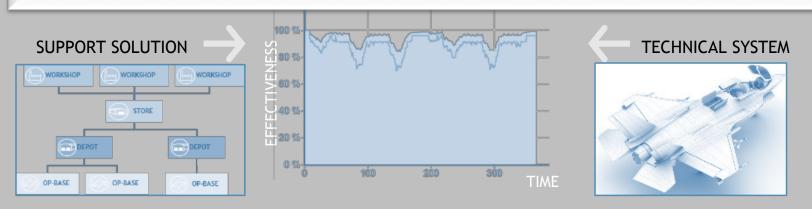




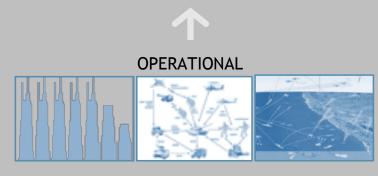
Opus Suite – Analysis Capability for Life Cycle Management

Consequence Analysis – Simulate how decisions impact readiness and sustainability over time

- Evaluate different scenarios, uncertainty and the impact of time-dynamic factors
 - simulate effectiveness, resource utilization and drivers of unavailability
 - Establish flexible, robust and sustainable solutions



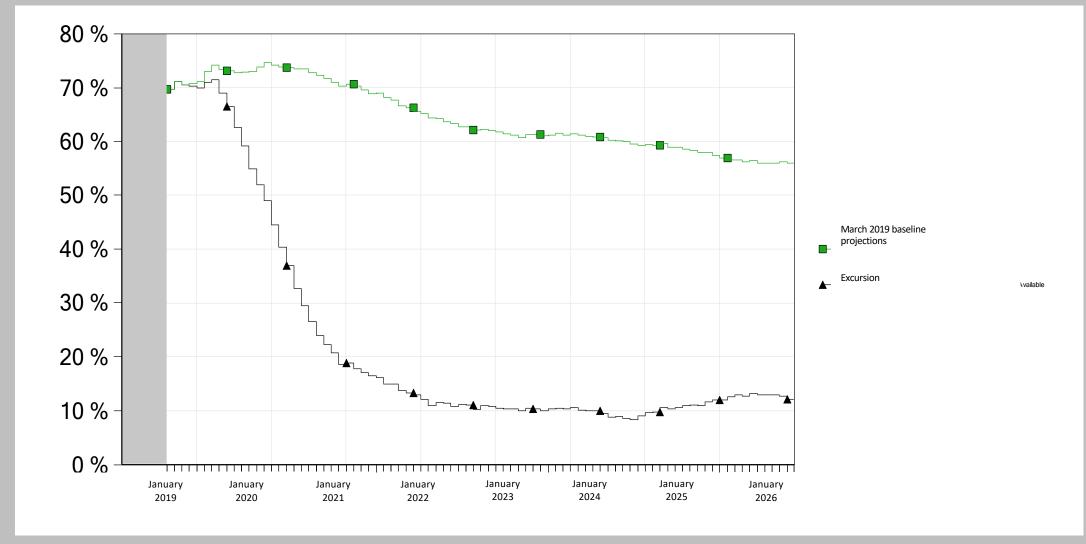






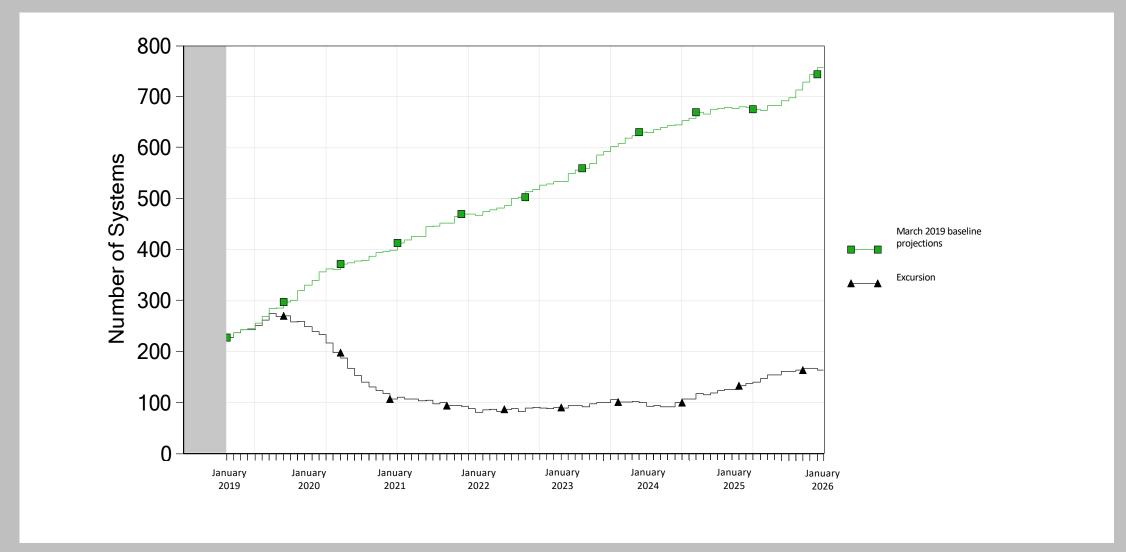


Impact of Supply Disruption On Mission Capable Rate - Time \(%)





Impact of Supply Disruption On Production





Corporate Best Practices (CBP) & Government Potential New Business Practice

CBP's Strategy:

- End-to-End Visibility
- Supply Chain Vulnerability Audit
- Improve Readiness, Cost, Effectiveness
- Nemawashi
- Whole of Government (Partnerships & Interoperability)

Application:

Industry IBM Watson Supply Chain Insights • Data Analytics • SAP ERPs • Artificial Intelligence • Machine Learning

DoD's Major Output is Readiness





Lessons Learned:

Critical Design Review (CDR) Highlights



CDR Lessons Learned (1 of 4)

<u>CDR recommends</u> that the design is adequate to start fabrication, integration and test article testing with acceptable risk.

CDR confirms

- 1 technical maturity point
 - -- stable design
 - -- initial product baseline is established
- 2 affordability and should cost goals (to include O&S Should Cost)

Potential CDR Action Items:

- 1 O&S Cost Affordability
- 2 Line Replaceable Unit (LRU) Logistics Analysis
- 3 Vendor Assessed Risk for Sustainment
- 4 Schedule Risk

Post Scripts (activity after CDR took place):

- A. Is "commonality" a marketing tactic or actual cost avoidance / savings?
- B. Are common Interactive Electronic Technical Manuals (IETM) realistic?



CDR Lessons Learned (2 of 4)



O&S Cost Affordability: Presented procurement and production affordability, but did not include sustainment, O&S Cost Affordability, nor O&S Should Cost (S-C) Initiatives. Post-MS C ACAT IC required to provide O&S Should Cost targets to DAE within 90 days.)

<u>Line Replaceable Unit (LRU) Logistics Analysis:</u> During trade studies, if the PMO opts not to require Failure Modes and Effects Criticality Analysis (FMECA), what could happen when program-specific LRUs increase?

<u>Vendor Assessed Risk for Sustainment:</u> Vendor identifies the risk, but does not correct it.

<u>Schedule Risk</u> - Schedule risk for LOG Demo due to multiple late or non-deliveries, and risk of tech manual late delivery? Schedule risk for tech manual verification and for a successful Logistics Demonstration (LOG DEMO)? Is LOG Demo a Milestone Entrance Criteria?



CDR Lessons Learned (3 of 4)



Commonality Discussion:

- (1)OEM promoted 75% commonality among 4 programs (3 others post MS-C).
- (2) However commonality was <u>not</u> a source selection discriminator, so the Program Management Office (PMO) could <u>not</u> verify this with vendor <u>before</u> source selection.
- (3) After source selection, PMO sought verification, and vendor/OEM stated that this was a mistake. Therefore 75% commonalty among programs removed.
- (4) Resulted in requirements threshold for the commonality requirement is ~55% and only within the program's FoV (not among the four programs).
- (5) Impact of actual commonality on logistics product development (LPD):
 - -- actual FoV commonality is LPD apples and oranges comparison
 - -- One part may be installed in a different location for each variant, installation drawings will be different, which in turn drives development of logistics products, to include remove & replace tasks/maintenance access.
 - -- Differences in vibration due to installation location may exist resulting in different test results.
 - -- Logistics commonality may be closer to 20%.



CDR Lessons Learned (4 of 4)



Common IETM:

- (1) Perception that a common Interactive Electronic Technical Manuals (IETM) for multiple platforms (programs) likely would yield a functional TM or return on investment (ROI).
- (2) If proposed piece/part/component commonality does <u>not</u> exist, then combining multiple platforms would increase complexity. IETM downloading becomes increasingly cumbersome / slow.
- (3) Additionally, due to scarce Operations & Maintenance (O&M) funding availability during sustainment, changes to IETMs becomes inefficient and unmanageable.
- (4) Real world example: goal of common IETM for several models
 - -- but resulted in IETM commonality restricted to a single provisioning file for one component
 - and IETM still did not work.





OSD Sustainment Fellowship Program Overview





<u>Purpose:</u> One-year leadership and management development program under the ASD(Sustainment)'s direction. (FY2019-20 Cohort applications closed in FEB 2019)

Fellows work in OASD(Logistics & Materiel Readiness) (Sustainment) in DC area.

- ODASD(Logistics) previously named ODASD(Transportation Policy) and ODASD(Supply Chain Integration)
- ODASD(Materiel Readiness) [formerly ODASD(Maintenance Policy and Programs)]
- ODASD(Product Support) [formerly ODASD(Materiel Readiness)]

Nominees: Mid-level logistics professionals demonstrating significant potential for advancement in the logistics career field.

- GS-13/GS-14 and Military 04/05
- Organizations include Services and DLA.

Nominee packages include: GO / FO / SES nomination letter, resume, 3 most recent performance appraisals/reports, training agreement, nominee objectives, and biography.

(Not)required – <u>but may be advantageous</u> for selection to ODASD(Product Support):

- program office experience
- Life Cycle Logistics Level I / II / III certification
- DAU LOG 465 Course





Parent Organizations pay all program-related expenses including salary, travel/per diem, course registration fees, transportation, and living expenses (for those outside the National Capital Region).

Fellowship typically include the following courses / trips:

- Logistics Course at Chapel Hill
- Legislative Affairs one week course at Georgetown
- Distribution facility
- Commercial facility

Annual announcement: typically late December during holidays (may change

- January: applications through **Service 4s** to board administrator
- March: Fellows selection / names announced end of March
- <u>July</u> Fellowship start date (typically after 4th of July holiday)
- 12-month program

Website: - https://www.acq.osd.mil/log/lmr/fellows_program.html

- What are the program objectives?
- How does the Fellows Program benefit you and your organization?
- Application process, requirements, and forms.
- Service articles from former Fellows.





Army-specific Long Term Training (LTT) Platforms for CP13 Careerists

- -- Only at DLA Aviation; HQDA G4; ODASA-OASA(APL)
- -- Ft. Lee office responsible for CP 13 in the Army
- -- If an Army person is selected for OSD temporary assignment, it is possible for CP 13 office to fund a temporary backfill.
- -- Unknown for other Career Paths and Services, but food for thought.
- 1. DLA Aviation Richmond, VA; GS12 or 13 (or NSPS equivalent); Training Start Date 24 Apr 17; 6 months
- 2. HQDA Deputy Chief of Staff, G4 Arlington, VA; GS12 or 13 (or NSPS equivalent); Training Start Date 24 Apr 17; 6 months
- 3. Life Cycle Logistics Policy Office, OASA(APL), Arlington, VA; GS13 or 14 (or NSPS equivalent); Training Start Date 24 Apr 17; 6 months





Current Fellows: 2018-19 Cohort

Ms. Kathleen (Kate) Barlow, ODASD(Product Support), United States Marine Corps

Ms. Wendi Duffy ODASD(Logistics)(SCI), Defense Contract Management Agency

Mr. Cal-Abram Johnson ODASD(Logistics)(Transportation), Defense Contract Management Agency

Mr. Jerry Johnson ODASD(Logistics)(Transportation), United States Transportation Command

Mr. Patrick (Dale) Koebel ODASD(Logistics)(SCI), United States Marine Corps

LTC Beverly Maddux ODASD(Logistics)(SCI), United States Army

Ms. Christine Morelli ODASD(Logistics)(SCI), Department of the Navy

MAJ Riecharde (Rick) Prenell ODASD(Logistics)(SCI), Department of the Army

Mr. Bernard Reger, PhD ODASD(Logistics)(Materiel Readiness), United States Army

Mr. Ben Thompson ODASD(Logistics)(Materiel Readiness), Department of the Navy

MAJ Henry Trudell (OSD Basing), United States Army

LtCol Shonry (Spidey) Webb ODASD(Logistics)(SCI), United States Air Force

Incoming Fellows: 2019-20 Cohort

MAJ Keith Brown, U.S. Army, ODASD(Materiel Readiness)

MAJ Shelia Day, U.S. Army, ODASD(Infrastructure)

Ms. Teria Cason, Integrated Warfare Systems, U.S. Navy, ODASD(Energy)

Mr. Johnathan Dehart, Naval Surface Warfare Center, U.S. Navy, ODASD(Environmental)

Ms. Rebecca Woods, Naval Sea Systems Command, U.S. Navy, ODASD(Product Support)

Mr. Joseph Gregg, Defense Contract Management Agency, ODASD(Logistics)



Air Force Research Lab (AFRL) Chief Engineer Sustainment Ontology Workshop May 15-16, 2019 (this week)



- ☐ Supports NDAA'19 SEC 832 (MITRE Study Implementation Plan)
- ☐ AFRL efforts to address MITRE's recommendations on:
 - (1) Cost and (2) Programming and Budgeting:

Create a common taxonomy for sustainment cost and build traceability from sustainment cost estimates to financial resources, to appropriations, and ultimately to expenditures.

- ☐ AFRL successful taxonomy efforts on propulsion systems.
- ☐ Attendees: Representatives from AFLCMC/LP at Tinker AFB and Australia (via Webex)

POC: Ms. Grizelda Loy-Kraft (AFRL CE) and Ms. Lynn Moad, Managing Partner, LB Moad Consulting, LLC lbmoadconsulting@yahoo.com or (937) 554-9301

May 15: 2:00-5:30pm EST

2:00-2:05	Welcome and Administrative Remarks
2:05-3:30	Ontology Mandate for Digital Engineering

3:30-3:45 Break

3:45-5:00 IoT/AR/VR Presentation and Demo

5:00-5:15 Workshop Day One Recap

May 16: 2:00-6:00pm EST

2:00-2:05	Welcome and Administrative Remarks
2:05-3:30	Ontology Primer – Concepts & Definitions

3:30-3:45 Break

3:45-4:45 Ontology Deeper Dive & Exercises

4:45-5:30 WSER Use Case Presentation and Data Elements/Ontology Discussion

5:30-6:00 Workshop Recap – Next Steps





Backup Slides



LCSP Development Guidelines: **Events & Timeline**



LCSP Development Events

- 1. LCSP Coordination Meeting w/ PSM, Service & OSD (6 12 months before DAB)
- 2. OSD Peer Review <u>and</u> Pre-MS B Draft LCSP (Pre-MS B Draft LCSP NLT 6 months before DAB)
- 3. PSM-led Product Support Management or Supportability IPTs (monthly or quarterly)
- 4. Informal Staffing (AO level): (5 6 months before DAB)
- a. <u>concurrent</u> Service- and OSD-level staffing whenever possible (<u>not the norm just</u> <u>yet</u>)
 - b. ODASD(Product Support) initiates A&S informal AO-level staffing
 - c. PSM is lead on adjudication process.
- 5. OSD Formal (SES/ Principal) Staffing: (3 5 months before DAB)
 - a. LCSP reflects adjudicated comments from informal AO-level staffing.
 - b. PEO-signed Draft LCSP required for SES-level formal staffing.
 - c. ODASD(Product Support) initiates A&S formal SES-level staffing
- 6. Final LCSP: (2 3 months before DAB)
 - a. LCSP reflects adjudicated comments from formal SES-level staffing.
 - b. PSM / Service obtains CAE approval of LCSP and annexes.
 - c. ODASD(Product Support) obtains ASD(Sustainment) signature. (DODI 5000.02 goal 45 days before DAB)



OUSD(A&S): LCSP Review Participants



OUSD(A&S) Offices that review / concur / non-concur with LCSPs:

	CCCD (7 1826) CTITICOC ETTAL TOTTOM 7 TOTTOM TOTTOM WILL LOCAL
1	ARA: Affordability (Dr. Spruill's office)
2	CAPE: Life Cycle Costs – Consistency with CARD and cost estimate development
3	CIO (Chief Info Officer): Meets platform IT standards and dependencies. (MAIS & Business Systems communicate or transfer data.)
4	Comptroller ([OUSD(C)]: xxxxx
5	DP&C (replaces DPAP): RFP and Contract related alignment with Acq Strat, RFP, etc. [Defense Pricing and Contracting (D,DP&C)]
4	DOT&E: TEMP alignment, OT&E results analysis, OT&E budgetary recommendations, confirm operational effectiveness / suitability in combat.
5	DT&E: Adequate Dev. Test & Eval and prepared for operational testing
6	I&IPM (replaces SSI): DoD space, strategic, and intel system acquisition; DoD Space & Intel Capabilities portfolio; civil, intel, and defense space communities; National Intelligence and Joint Natl Programs (NIP and Joint NIP); and MIL Intel Programs (MIL). [Information & Integration Portfolio Management (I&IPM)]
7	JCS J4: Capability Document's sustainment metrics alignment
8	JCS J8: xxxx
9	MR (old MPP renamed Materiel Readiness): CLA / DSOR / CBM+ / SIM / IUID
10	Policy [OUSD(Policy)]: xxxx
11	PS (old MR renamed Product Support): 5000.02 Encl 6/8; 10USCXXXX for PS/AcqLog; O&S Cost Affordability, LCSP Lead
12	OGC (Office of General Counsel): DODI 5000.02, Encl 1 and Encl 6 requirements; confirm wording is clear and unambiguous; and look for disconnects in logic or documentation. (typically will only perform formal / SES review)
13	P&R [OSD(Personnel & Readiness): Consistency with MER (MER will become part of the CARD.MER/CARD format in dev.)
14	Resource Manager (Army G8 PAE, ASN/RDA, Air Force):
15	S/E: Consistency with SEP, RAM-C, PPP/CPI . (typically will only perform informal / AO review)
16	SCI [Supply Chain Integration Div w/in ODASD(LOG)]:: SCRM, IUID, SIM [Serialized Item Management; Item Unique Identification; Supply Chain Risk Management]
17	TP [Transportation Policy Div w/in ODASD(LOG)]: Transportability / Transportation engineering reqts / assessment
18	Corrosion: OSD Corrosion Policy and Oversight Office
19	Sec807 (OIPT) Lead: Tactical Warfare Systems (TWS); Command, Control, And Communication (C3), Cyber, and Business Systems (C3CB); or Space, Strategic, and Intelligence Systems (SSI)



Comment Resolution Matrix (CRM) and Critical Comments



DAE Memo: "Guidelines for Acquisition Document Reviews" (March 4, 2016)

"Effective with this memorandum, DAB members and their staff comments on DAB documents will now be formally characterized as:..."

OSD Staff role to advise DAE and Services, not to independently direct DoD components.

"DAB Issue" (formerly Critical):

- -- ODASD(Product Support): LCSP indicates risk / issues preventing product support strategy (PSS) from meeting Warfighter sustainment outcomes and affordability caps.
- -- Perceived risk to milestone decision approval
- -- May require an OIPT, pre-DAB, or DAB discussion before LCSP approval
- -- A&S concurrently informs: DAB chairperson, MDA, OIPT Leader, and Service
- -- Legal / Statutory compliance and/or DoDI 5000.02 waiver requests are automatically "DAB Issues" and will be brought to the DAB chairperson's attention.
- -- MDA determines potential for discussion at actual DAB review meeting.

Advisory (formerly Substantive)

- -- LCSP compliant but incomplete, inconsistent, or confusing
- -- Sections *potentially* unnecessary, incorrect, incomplete, misleading, or inconsistent with other sections or documents.

Administrative (no change)

- -- Minor formatting / table / figure / label corrections
- -- Typographical or grammatical errors



LCSP: 7 annexes (topics) must include or address if not required



LCSP Annexes – must be included or addressed for ASD(Sustainment) approval

- 1 Business Case Analysis (BCA) (MS B, C, FRP + 5 YRS) (DODI 5000.02)
 - -- Not necessarily a PBL BCA.
 - -- Example: Army uses "analysis of product support alternatives" (APSA) per ASD(Sustainment) PBL Guidebook and AR 700-127, infers more rigor in a BCA than APSA.
- 2 Independent Logistics Assessment (ILA) (DODI 5000.02) (MS B, C, FRP + 5 YRS)
 - -- MDAP Programs only per DODI 5000.02.
 - -- MAIS: OSD does not require it for MAIS programs. However, Services may require it for MAIS.
- **3 System Disposal Plan** (MS C) (DODI 5000.02; DODI 4160.28; DOD 4160.21-M; DODI 4160.28-M)
- **4 Preservation of Storage of Unique Tooling** (MS C) [DODI 5000.02; DFARS 207.106 (S-73)]
- 5 Core Logistics Analysis (CLA) (MS A, B, C) (overarching Depot analysis)
 [DODI 5000.02; DODI 4151.xx (DSOR); DODI 4151.21]
 - -- MDAP Programs only per DODI 5000.02.
 - -- MAIS: OSD does not require it for MAIS programs. However, Services may require it for MAIS.
- 6 Intellectual Property (IP) Strategy (DODI 5000.02) (MS C)
 - -- IP Strategy becomes part of LCSP during O&S Phase.
 - -- However, depending on adequacy of IP Strategy in the AS, IP planning may be included in LCSP by MS B / C.
- 7 Replaced System Sustainment Plan (RSSP) (DODI 5000.02) (10 USC 2437)
 - -- Once decision made to replace another system, Service prepares it for existing system.
 - -- may be as early as MS A or NLT MS B

Note: Annexes in purple font identify component-specific requirements, including detailed system Product Support Plan/integrated product support elements.



Pending Update of 2008 DoD Logistics Human Capital Strategy



Updated 2018- 2025 DoD Logistics Human Capital Strategy

- directly aligned with the 2018 National Defense Strategy (NDS) / SecDef 3 Lines of Effort (more lethal force, strengthen alliances, and create new partnerships, and business reform)
- demands an agile, relevant, interoperable logistics workforce
- US and Allies require logistics skill sets to respond to the rapid technological advancements, multiple global conflicts and regional discords.

Strategic Goal 1 – Develop & Manage the Talent:

- 1.1 Develop a logistics functional competency model.
- 1.2. Understand and use hiring and retention authorities.
- 1.3. Forecast demand for logisticians across Joint Force and ID staffing risks.
- 1.4 Enhance logistics professional development opportunities (education, cross-training, job rotations, career broadening, etc.).
- 1.5 Incentivize workforce performance and recognize achievements.

<u>Strategic Goal 2 – Enhance LOG Human Capital-Related Processes & Tools:</u>

- 2.1 ID common IT tools to manage the logistics functional community (LFC).
- 2.2 Develop methods to collect/share human capital management best practices, processes, and lessons learned.

Strategic Goal 3 – Employ strategic communication and collaboration:

- 3.1 Foster alignment/integration with other functional communities (e.g., financial management, contracting, STEM, etc.).
- 3.2 Create a digital home for the Logistics Functional Community (LFC).



OASD(Sustainment) Sustainment Synchronization Meeting ASD(Sustainment) Guidance Memos Sustainment Reviews (SR) draft memo



☐ Sustainment Reviews per 10 USC 2441 — planning for the memo

- suspense dates for information requirements
- SRs previously held, their results, action items highlights, compared to data requirements
- FY19 Calendar: scheduled Service SRs
- DAES MDAP list: https://www.acq.osd.mil/damir/
- Compare design metrics to readiness and O&S cost metrics.
- AIR repository likely
- Compare these efforts with WSARA 2009 Product Support Assessments (PSA)
- ID performance thresholds (RAM-C) for follow-on reviews
- DMSMS / obsolescence considerations
- Compare Sustainment Review requirements to ILA per PL 112-81 Sec 832
 - ILA conducted 6 months prior to and feeds Sustainment Reviews?
- Army Best Practices: OSR and Sustainment Action Memos (SAM)
- Overhead impact? Added cost vs. benefit?





Learn. Perform. Succeed

Perhaps a better, more integrated depiction...?



LIFE CYCLE SYSTEMS MANAGEMENT

SUPPLY CHAIN MANAGEMENT



Integrated management of linked activities associated with providing materiel from a raw material stage to an end user as a finished product.

AFFORDABLE, RELIABLE, MAINTAINABLE, SUPPORTABLE, & AVAILABLE SYSTEMS SUPPLY MANAGEMENT



Includes procurement to disposal of defense system material, and integration of multiple material sources and processes to meet war fighter requirements. MAINTENANCE SUPPORT



Includes planning and executing maintenance, both scheduled and unscheduled, to defense system equipment.

DEPLOYMENT/ DISTRIBUTION/ TRANSPORTATION



Includes transportation, packaging, cargo scheduling, & dispatching of materials, support services, and personnel in response to customer requirements to move sustain the force.

OUTCOME-BASED LIFE CYCLE PRODUCT SUPPORT ARRANGEMENTS

LIFE CYCLE LOGISTICS



Includes planning, development, implementation, and management of a comprehensive, affordable, and effective systems support strategy.

WARFIGHTER SUPPORT ACROSS LIFE CYCLE